CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

QC ABSTRACT

.ME OF WORK: Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, ashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka w Town Sub division(Package No-04)

SO	Item Of Work	Name of Test	Frequency of Test/Quantity	Executed Quantity	Number of Tests Required	Number of Tests Conducted
		Materials				
1	Cement	Fineness by dry sieving	One Test		1	1
		Finess by Air permeablity method	One Test		1	1
		Density	One Test		1	1
		Standard Consistency	One Test		1	1
		Initial Setting time	One Test		1	1
		Final Setting time	One Test		1	1
		Soundness (Le Chatelier's Method)	One Test		1	1
		Compressive Strength	One Test		1	1
2	Coarse aggregate(40 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
3	Coarse aggregate(20 mm down size)	SIEVE ANALYSIS	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		Specific Gravity	One Test		1	1
		Bulk Density(Loose)	One Test		1	1
		Bulk Density(Compacted)	One Test		1	1
		Water Absorption	One Test		1	1
		Aggregate crushing Value	One Test		1	1
		Aggregate Impact Value	One Test		1	1
4	Fine aggregate	SIEVE ANALYSIS	One Test		1	1
		Water Absorption	One Test		1	1
		Specific Gravity	One Test		1	1
		Material finer than 75 micron	One Test		1	1
5	Steel	Bend test	One Test		1	1
		Tensile Test	One Test		1	1
		Yield Test	One Test		1	1
		ReBend test	One Test		1	1
6	Precast (100mm)	Core Compressive Strength	One Test		1	1
		Corrected Cylinder Compressive Strength	One Test		1	1
		Equivalent Cube Compressive Strength	One Test		1	1
7	Precast (230mm)	Core Compressive Strength	One Test		1	1
		Corrected Cylinder Compressive Strength	One Test		1	1
		Equivalent Cube Compressive Strength	One Test		1	1

AE

M 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

8	RCC(M20)	Compressive Strength(7days and 28days)	3 set /2600-2700 cum	2647.71	6	6
9	BC	SIEVE ANALYSIS	One Test		1	1
		STRIPPING VALUE	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		IMPACT VALUE	One Test		1	1
		Specific gravity	One Test		1	1
		Water Absorption	One Test		1	1
		Marshal Stability	One Test		1	1
		Marshal flow	One Test		1	1
		Percent air Voids	One Test		1	1
		Percent Voids in mineral	One Test		1	1
		Percent Voids filled with Bitumen	One Test		1	1
		Density	One Test		1	1
		Gradation	One Test		1	1
10	DBM	SIEVE ANALYSIS	One Test		1	1
		STRIPPING VALUE	One Test		1	1
		Flakiness Index	One Test		1	1
		Elongation Index	One Test		1	1
		IMPACT VALUE	One Test		1	1
		Specific gravity	One Test		1	1
		Water Absorption	One Test		1	1
		Marshal Stability	One Test		1	1
		Marshal flow	One Test		1	1
		Percent air Voids	One Test		1	1
		Percent Voids in mineral	One Test		1	1
		Percent Voids filled with Bitumen	One Test		1	1
		Density	One Test		1	1
		Gradation	One Test		1	1
1	BITUMEN	Ductility	One Test		1	1
		Softening Point	One Test		1	1
		Penetration	One Test		1	1
		Flash Point	One Test		1	1
		Fire Point	One Test		1	1
2	TACK COAT	Rate of spread	One Test		1	1
3	Thermoplastic Compound	Colour	One Test		1	1
		Softening Point	One Test		1	1
		Luminance Factor	One Test		1	1
		Cracking Resistance	One Test		1	1
		Skid Resistance	One Test		1	1
		Yellow Index (For White Thermoplastic Plant)	One Test		1	1
		Drying Time	One Test		1	1
		Binder Content	One Test		1	1
		Glass Beads Content	One Test		1	1

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID	:	**CP-2022-04-28-31** **Date: 24-03-22**
Project Name	:	Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)
Agency	:	Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024
Customer's Reference	:	BBMP/EE/YNK.D/EPMT-08/W.O/109/2021-22
Date of Receipt	:	21-03-22
Sample Type	:	Birla Super 53grade
Reference to BIS codes	:	IS 12269 2013, 53 Grade Ordinary Portland cement Specification , IS 4031 (Part 1,2 3,4,5, 6,11):1988 IS 4031 Part 1 (RA 2021) DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4 IS 4031 Part 2, (RA 2018) Determination of Fineness by Blaine Air Permeability IS 4031 Part 3, (RA 2019) Determination of Soundness, Clause 5, Clause 6 IS 4031 Part 4, (RA 2019) Determination of Consistency of Standard Cement Paste, Clause 5 IS 4031 Part 5, (RA 2019) Determination of Initial & Final Setting Time, Clause 5 IS 4031 Part 11, (RA 2019)DETERMINATION OF DENSITY , Clause 6
Date of test	:	22-03-22
Environmental Conditions during test	:	Temperature: 26°C Humidity: 72%

Sl.No.	Physical properties	Results	Requirement as per IS 12269: 2013
1	Fineness by dry sieving (%)	2.28	–
2	Finess by Air permeablity method (m^2/kg,Min)	274.6	225m^2/kg, Min
3	Density (gm/cc)	3.12	–
4	Standard Consistency (%)	29%	Not specified
5	Initial Setting time	155 minutes	Not less than 30 minutes
6	Final Setting time	240 minutes	Not more than 600 minutes
7	Soundness (Le Chatelier's Method)	1.5mm	Not more than 10 mm

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID	:	**CP-2022-04-28-31**	**Date: 24-03-22**
Project Name	:	Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)	
Agency	:	Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024	
Customer's Reference	:	BBMP/EE/YNK.D/EPMT-08/W.O/109/2021-22	
Date of Receipt	:	21-03-22	
Sample Type	:	40mm down size coarse aggregate	
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2021 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties	
Date of test	:	21-03-22	

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:

Total weight taken : 15000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	80 mm	0	0	0.0	100	100
2	40 mm	342	342	2.3	97.7	90-100
3	20 mm	5439	5781	38.5	61.5	30-70
4	10 mm	4579	10360	69.1	30.9	10-35
5	4.75 mm	4260	14620	97.5	2.5	0-5
6	Pan	380	15000	100.0	0	---

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-೫೬

Page 1/2

AE

CIVIL Pro
Sig.....
Date.....
BANGALORE

Format No: CP/TF/01

TEST REPORT ON COARSE AGGREGATES

Lab ID	:	CP-2022-04-28-31 Date: 23-03-22
Project Name	:	Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)
Agency	:	Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024
Customer Reference	:	BBMP/EE/YNK.D/EPMT-08/W.O/109/2021-22
Date of Receipt	:	21-03-22
Sample Type/ Size	:	20mm down size coarse aggregate
Reference to BIS codes	:	IS: 383:2016 (Specification for Coarse and fine Aggregates) IS: 2386 :1963(Part - 1,3,4) RA2021 IS 2386 Part 1: Particle Size and Shape IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption IS 2386 Part 4: Mechanical Properties
Date of test	:	21-03-22

SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:

Total weight taken : 5000 grams

Sample No.	Sieve No.	Weight Retained in gms	Cumulative Weight Retained in gms	% Cumulative Weight Retained	% Passing	Required as per IS 383:2016
1	40 mm	0	0	0	100	100
2	20 mm	214	214	4.3	95.7	90-100
3	10 mm	2435	2649	53.0	47.0	25-55
4	4.75 mm	2134	4783	95.7	4.3	0-10
5	Pan	217	5000	100	0	_

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪವಿಭಾಗ ಉಪವಿಭಾಗ.
ಬ.ಮ.ನ.ಪ. ಬೆಂಗಳೂರು-106

AE

CIVIL Pro
Sig.....
Date.....
BANGALORE

TEST REPORT OF FINE AGGREGATE

Lab ID : CP-2022-04-28-31

Date: 23-03-22

PHYSICAL PROPERTIES

Sl.no	Tests	Result	Requirements as per IS 383:2016
1	Water Absorption(%)	0.21	–
2	Specific Gravity	1.58	–
3	Material finer than 75 micron(%)	7.7	Uncrushed fine Aggregate Max 3%, Crushed Fine aggregate Max 15%, Mixed Fine aggregate Max 12%, Manufactured Fine aggregate Max 10%

• The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig Date BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ ಯುಲಪಡಿಂ ಉಪನಗರ ಉಪವಿಭಾಗ, ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

Format No: CP/TF/01

TEST REPORT OF PRECAST COVER SLAB

ID	:	CP-2022-04-28-31 **Date: 25-03-22**
ject Name	:	Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)
ncy	:	Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024
tomer's Reference	:	BBMP/EE/YNK.D/EPMT-08/W.O/109/2021-22
e of Receipt	:	21-03-22
mple Type /Size	:	Precast Cover Slab 100mm Thick
rence to BIS codes	:	IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete
e of test	:	21/03/2022

Identification Mark	Diameter of the core	Height of the core	Weight of the core	Area	Failure Load	Core Compressive strength	Corrected Cylinder Compressive strength	Equivalent Cube Compressive strength
	(mm)	(mm)	(kg)	(Sq.mm)	(KN)	(N/mm^2)	(N/mm^2)	(N/mm^2)
Cover Slab-1	75.49	100.52	1.895	4475	82.6	18.5	17.2	21.5
Cover Slab-2	75.41	100.49	1.866	4465	80.6	18.0	16.8	21.0
Cover Slab-3	75.52	100.65	1.856	4478	81.3	18.2	16.9	21.1

te results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ.
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

AE

****End of Report****

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

Date: 01/04/2022

D : CP-2022-04-28-31

ct Name : Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)

cy : Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024

omer's Reference : BBMP/EE/YNK.D/EPMT-08/W.O/109/2021-22

of Receipt : 21-04-18

omer ID : Drain Bottom Raft-AMS Extention 2nd A main Road

ple Type /Size : 150X150X150 mm

ple grade/Age : M20 / 7 Days Compressive Strength

rence to BIS codes : IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5

of test : 01/04/2022

Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
Drain Bottom Raft-AMS Extention 2nd A main Road	M20	25/03/2022	01/04/2022	151.06 X 149.32 X 151.08	22557	8.167	425.3	18.9	18.7
Drain Bottom Raft-AMS Extention 2nd A main Road	M20	25/03/2022	01/04/2022	149.46 X 151.68 X 151.64	22669	8.767	427.7	18.9	
Drain Bottom Raft-AMS Extention 2nd A main Road	M20	25/03/2022	01/04/2022	150.57 X 151.79 X 151.33	22854	8.860	423.5	18.5	

he results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪವಿಭಾಗ ಉಪವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

Page 1/1
****End of Report****

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

D	:	CP-2022-04-28-31 **Date: 04/04/2022**
ct Name	:	Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)
cy	:	Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024
omer's Reference	:	BBMP/EE/YNK.D/EPMT-08/W.O/109/2021-22
of Receipt	:	21-04-18
omer ID	:	Drain Side Wall-AMS Extention 2nd A main Road
ple Type /Size	:	150X150X150 mm
ple grade/Age	:	M20 / 7 Days Compressive Strength
rence to BIS codes	:	IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5
of test	:	03/04/2022

Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
Drain Side Wall-AMS Extention 2nd A main Road	M20	27/03/2022	03/04/2022	150.79 X 151.62 X 151.44	22863	8.622	431.4	18.9	18.7
Drain Side Wall-AMS Extention 2nd A main Road	M20	27/03/2022	03/04/2022	151.84 X 149.06 X 149.60	22633	8.385	422.0	18.6	
Drain Side Wall-AMS Extention 2nd A main Road	M20	27/03/2022	03/04/2022	150.60 X 150.76 X 151.60	22704	8.808	423.5	18.7	

te results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R.KARTHIK-RECHAN
Authorized Signatory
Quality Manager

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

Page 1/1
****End of Report****

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

ID	:	CP-2022-04-28-31 **Date: 24/04/2022**
ect Name	:	Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)
ncy	:	Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024
tomer's Reference	:	BBMP/EE/YNK.D/EPMT-08/W.O/109/2021-22
e of Receipt	:	21-04-18
tomer ID	:	Drain Side Wall-AMS Extention 2nd A main Road
ple Type /Size	:	150X150X150 mm
ple grade/Age	:	M20 / 28 Days Compressive Strength
rence to BIS codes	:	IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl.5
e of test	:	24/04/2022

	Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
	Drain Side Wall-AMS Extention 2nd A main Road	M20	27/03/2022	24/04/2022	149.20 X 149.93 X 150.68	22369	8.315	519.2	23.2	23.0
	Drain Side Wall-AMS Extention 2nd A main Road	M20	27/03/2022	24/04/2022	149.29 X 151.48 X 151.94	22614	8.945	525.1	23.2	
	Drain Side Wall-AMS Extention 2nd A main Road	M20	27/03/2022	24/04/2022	149.19 X 149.43 X 152.00	22293	8.211	503.0	22.6	

The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro BANGALORE Sig..... Date.....

KARTHIK RECHAN
Authorized Signatory
Quality Manager

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ.
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

Page 1/1
****End of Report****

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

Format No: CP/TF/01

TEST REPORT OF CEMENT CONCRETE CUBES

D	:	CP-2022-04-28-31 **Date: 24/04/2022**
ct Name	:	Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)
ty	:	Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024
mer's Reference	:	BBMP/EE/YNK.D/EPMT-08/W.O/109/2021-22
of Receipt	:	21-04-18
mer ID	:	Drain Side Wall-AMS Extention 2nd A main Road
le Type /Size	:	150X150X150 mm
le grade/Age	:	M20 / 28 Days Compressive Strength
ence to BIS codes	:	IS: 516 - 1959 (RA 2018) Methods of Tests for Strength of Concrete Cl 5
of test	:	24/04/2022

Identification Mark	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of the sample (kg)	Failure Load (KN)	Compressive strength (N/mm^2)	Average Compressive Strength (N/mm^2)
Drain Side Wall-AMS Extention 2nd A main Road	M20	27/03/2022	24/04/2022	149.77 X 151.99 X 150.88	22764	8.471	543.5	23.9	23.0
Drain Side Wall-AMS Extention 2nd A main Road	M20	27/03/2022	24/04/2022	150.66 X 149.10 X 150.15	22463	8.553	518.6	23.1	
Drain Side Wall-AMS Extention 2nd A main Road	M20	27/03/2022	24/04/2022	151.32 X 150.71 X 151.83	22805	8.600	503.2	22.1	

results obtained are satisfactory as per standard requirements.

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ
ಬ.ಬ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.. TC-5548

Format No: CP/TF/01

TEST REPORT ON BITUMEN

ab ID	:	CP-RW-2022-04-28-31 **Date: 06-04-22**
roject Name	:	Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)
gency	:	Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024
ustomer's Reference	:	BBMP/EE/YNK.D/EPMT-08/W.O/109/2021-22
ate of Receipt	:	04-04-22
ample Type	:	Bitumen
eference to BIS codes	:	IS: 1201-2021, IS: 1202-1220(1978) (Reaffirmed-2019)
ate of test	:	04-04-22

Test Results

Sl.no	Name of Test	Result	Requirements as per IS:73-2013
1	Penetration at 25°C , in 1/10th mm	62	60 to 70
2	Softening Point, °C	52.4	Min. 40°C
3	Ductility, cm	96	Min. 75cm
4	Flash point, °C	248	Min. 220°C
	Fire point, °C	276	

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig Date BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-106

****End of Report****

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

TEST REPORT OF AGGEGRATE STRIPPING VALUE OF ROAD AGGRGATE (IS:6241)

Lab ID	:	CP-RW-2022-04-28-31 Date: 11-04-22
Project Name	:	Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)
Agency	:	Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024
Customer Reference	:	BBMP/EE/YNK.D/EPMT-08/W.O/109/2021-22
Date of Receipt	:	07-04-22
Type of Mix	:	DBM(Dense Bitumnous Macadam)
Date of test	:	07-04-22
Type of Binder	:	60/70
% of Binder Used	:	5.0%
Weight of Aggregate	:	200.0 gm
Weight of Binder	:	10.0 gm
Temperature of water bath	:	40°C

No of test	Retained Stripping Percentage	Stripping Percentage	Average Retained Stripping Percentage	Secified limits as per MORTH specification table 500-8
1	99.0	1.0	98.5	Minimum Retained Coating 95%
2	98.5	1.5		
3	98.0	2.0		

The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig ..... Date ..... BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬ.ಬ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-106

Page 1/1
****End of Report****

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

TESTS RESULTS ON STABILITY OF MIX

Lab ID	:	CP-RW-2022-04-28-31 Date: 11-04-22
Project Name	:	Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)
Agency	:	Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024
Customer Reference	:	BBMP/EE/YNK.D/EPMT-08/W.O/109/2021-22
Date of Receipt	:	07-04-22
Type of Mix	:	DBM (Dense Bituminous Mecadam)
Date of test	:	07-04-22

The results of the tests conducted on the Dense Bituminous Macadam mix sample are as follow

Sl.No	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.54	11.68	9KN(Min)
2	Marshal flow at 60°C, mm	3.62	3.78	2-4
3	Percent air Voids	4.72	4.52	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.62	14.88	13-15
5	Percent Voids filled with Bitumen(VFB %)	68.98	72.85	65-75
6	Density, g/cc	2.41	2.43	–

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro
R.KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig Date BANGALORE

Page 1/1
End of Report

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಧಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಜ.ಜ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-10೬

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

SICAL REQUIREMENTS FOR COARSE AGGREGATE FOR DENSE BITUMINOUS MACADAM

	:	CP-RW-2022-04-28-31 **Date: 11-04-22**
Name	:	Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)
	:	Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024
ıer Reference	:	BBMP/EE/YNK.D/EPMT-08/W.O/109/2021-22
f Receipt	:	07-04-22
f Mix	:	DBM (Dense Bituminous Macadam)
f test	:	07-04-22

Table 500-6 : Physical Requirements fo Coarse Aggregate for Dense Bituminous Macadam

Property	Test	Result	Specification	Method of Test
ırtical Shape	Flakiness Index	13.0	Combined Flakiness & Elongation Index for DBM is Maximum 35%	IS:2386 Part I
	Elongation Index	15.0		
Strength	Aggregate Impact Value	22.0	Maximum 30%	IS:2386 Part IV
ecific gravity	Specific gravity	2.61	Maximum 2.7	IS:2386 Part III
ter Absorption	Water Absorption	0.28	Maximum 2%	IS:2386 Part III

esults obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig Date BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quallity Manager

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-106

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3
Certificate No.: TC-5548

TEST RESULTS OF GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2007)

Lab ID : CP-RW-2022-04-28-31 Date: 11-04-22

Project Name : Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)

Agency : Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024

Customer Reference : BBMP/EE/YNK D/EPMT-08/W.O/109/2021-22

Date of Receipt : 09-04-22

Type of Mix : BC-Plant (Bituminous Concrete)

Date of test : 09-04-22

Oven Dry Weight : 5000 Grams

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-17(grading-2)
19	0	0	0 0	100.0	100
13.2	55	55	1.1	98.9	90-100
9.5	802	857	17.1	82.9	70-88
4.75	858	1715	34.3	65.7	53-71
2.36	498	2213	44.3	55.7	42-58
1.18	462	2675	53.5	46.5	34-48
0.6	512	3187	63.7	36.3	26-38
0.3	577	3764	75.3	24.7	18-28
0.15	425	4189	83.8	16.2	12-20
0.075	418	4607	92.1	7.9	4-10
PAN	393	5000	100	0.0	0

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.
R.KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro Sig Date BANGALORE

ಕಿರಿಯ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಜಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-106

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No. TC-5548

PHYSICAL REQUIREMENTS FOR COARSE AGGREGATE FOR BITUMINOUS CONCRETE

: CP-RW-2022-04-28-31

Name : Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)

Date: 12-04-22

: Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024

ner Reference : BBMP/EE/YNK.D/EPMT-08/W.O/109/2021-22

f Receipt : 09-04-22

f Mix : BC (Bituminous Concrete)

f test : 09-04-22

Table 500-16 : Physical Requirements fo Coarse Aggregate for Bituminous Concrete

Property	Test	Result	Specification	Method of Test
artical Shape	Flakiness Index	108	Combined Flakiness & Elongation Index for BC is Maximum 35%	IS:2386 Part I
	Elongation Index	13.2		
Strength	Aggregate Impact Value	23.5	Maximum 24%	IS:2386 Part IV
pecific gravity	Specific gravity	2.65	Maximum 2.7	IS:2386 Part III
ater Absorption	Water Absorption	0.28	Maximum 2%	IS:2386 Part III

results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig Date BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quallity Manager

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-೫೬

Page 1/1

End of Report

Lab ID : CP-RW-2022-04-28-31

Date: 14-04-22

Weight of Sample(gm) : 477

AFTER EXTRACTION(Trail-1)

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10(grading -2)
37.5	0	0	0	100.0	100
26.5	11	11	2.31	97.7	90-100
19	32	43	9.01	91.0	71-95
13.2	98	141	29.56	70.4	56-80
4.75	95	236	49.48	50.5	38-54
2.36	82	318	66.67	33.3	28-42
0.3	65	383	80.29	19.7	7-21
0.075	58	441	92.45	7.5	2-8

AFTER EXTRACTION(Trail-2)

Weight of Sample(gm) : 476

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10(grading -2)
37.5	0	0	0	100.0	100
26.5	12	12	2.52	97.5	90-100
19	35	47	9.87	90.1	71-95
13.2	101	148	31.09	68.9	56-80
4.75	98	246	51.68	48.3	38-54
2.36	88	334	70.17	29.8	28-42
0.3	62	396	83.19	16.8	7-21
0.075	49	445	93.49	6.5	2-8

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

CIVIL Pro BANGALORE Sig Date

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexports@gmail.com

CIVIL PRO
AN ISO 9001 : 2008 COMPANY & ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017
4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

Lab ID : CP-RW-2022-04-28-31

Date: 16-04-22

AFTER EXTRACTION - Trail-1

Total Weight of the Sample(gm) : 471

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	10	10	2.1	97.9	90-100
9.5	77	87	18.5	81.5	70-88
4.75	98	185	39.3	60.7	53-71
2.36	72	257	54.6	45.4	42-58
1.18	38	295	62.6	37.4	34-48
0.6	22	317	67.3	32.7	26-38
0.3	54	371	78.8	21.2	18-28
0.15	35	406	86.2	13.8	12-20
0.075	25	431	91.5	8.5	4-10

AFTER EXTRACTION - Trail-2

Total Weight of the Sample(gm) : 472

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	13	13	2.8	97.2	90-100
9.5	72	85	18.0	82.0	70-88
4.75	95	180	38.1	61.9	53-71
2.36	87	267	56.6	43.4	42-58
1.18	31	298	63.1	36.9	34-48
0.6	29	327	69.3	30.7	26-38
0.3	52	379	80.3	19.7	18-28
0.15	28	407	86.2	13.8	12-20
0.075	25	432	91.5	8.5	4-10

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig. Date. BANGALORE

R KARTHIK RECHAN
Authorized Signatory
Quality Manager

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ.
ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-10

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

Lab ID : CP-RW-2022-04-28-31

Date: 16-04-22

Weight of Sample(gm) : 477

AFTER EXTRACTION(Trail-1)

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10(grading -2)
37.5	0	0	0	100.0	100
26.5	12	12	2.52	97.5	90-100
19	33	45	9.43	90.6	71-95
13.2	101	146	30.61	69.4	56-80
4.75	98	244	51.15	48.8	38-54
2.36	85	329	68.97	31.0	28-42
0.3	66	395	82.81	17.2	7-21
0.075	52	447	93.71	6.3	2-8

AFTER EXTRACTION(Trail-2)

Weight of Sample(gm) : 476

IS Sieve Size(mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Specification Limits as per MORTH specification Table 500-10(grading -2)
37.5	0	0	0	100.0	100
26.5	15	15	3.15	96.8	90-100
19	41	56	11.76	88.2	71-95
13.2	98	154	32.35	67.6	56-80
4.75	102	256	53.78	46.2	38-54
2.36	68	324	68.07	31.9	28-42
0.3	66	390	81.93	18.1	7-21
0.075	58	448	94.12	5.9	2-8

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.
R KARTHIK RECHAN
Authorized Signatory
Quality Manager

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರವರ ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ, ಜಿ.ಬಿ.ಎಂ.ಪಿ, ಬೆಂಗಳೂರು-106

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

DETERMINATION OF RATE OF SPREAD TACK COAT

Lab ID : CP-RW-2022-04-28-31

Project Name : Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)

Date: 19-04-22

Agency : Sri.Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024

Customer Reference : BBMP/EE/YNK D/EPMT-08/W.O/109/2021-22

Date of Receipt : 17-04-22

Type of Mix : Tack coat

Date of test : 17-04-22

Sl.No	Determination	Unit	TEST 1	TEST 2
1	Size of Plate (mxm)	Mt	0.30 x .30	0.30 x .30
2	Area of Plate (a)	Sq mtr	0.09	0.09
3	Initial Wt of empty Plate (b)	Kg	0.78	0.748
4	Final weight of plate after application of tack Coat (c)	Kg	0.804	0.771
5	Weight of tack Coat (d=c-b)	Kg	0.024	0.023
6	Rate of spread of tack coat	Kg/sq m	0.267	0.256
7	Average	Kg/sq m	0.261	
8	Specified Limit	Kg/sq m	0.250 Kg/sq m	

* The results obtained are satisfactory as per standard requirements.

CIVIL Pro Stg Date BANGALORE

FOR CIVIL Pro

R RARTHIK RECHAN
Authorized Signatory
Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL| ENVIRONMENTAL
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES

TEST RESULTS OF BITUMEN BINDAR CONTENT AND GRADATION FOR BC
IS 2386 (Part I) 1963 (RA 2011)

Lab ID : CP-RW-2022-04-28-31

Project Name : Restoration and Improvements of Balance roads of AMS layout, Venugopal layout, Akashvani layout, Chikkabettahalli layout, Mahi layout and surrounding areas in Ward no-03 of Yelahanka New Town Sub division(Package No-04)

Date: 19-04-22

Agency : Sri Gopi Reddy, No.13, Ground Floor, Sai Bab Temple Road, Opp Coffe Board Layout, Mariyanna Palya Bangalore-560024

Customer Reference : BBMP/EE/YNK.D/EPMT-08/W.O/109/2021-22

Date of Receipt : 17-04-22

Type of Mix : BC (Defence Layout 5th Cross)

Date of test : 17-04-22

Sl.no	Description	Index	Trail 1	Trail 2
1	Weight of the Sample	A	500	500
2	Weight of the sample After extraction	B	472	471
3	Bitumen percentage	$\frac{A-B}{A} \times 100$	5.60	5.80
4	Average percentage	%	5.7	

FOR CIVIL Pro.

CIVIL Pro Sig Date

R KARTHIK-RECHAN
Authorized Signatory
Quality Manager

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಯಂತರರು
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಎಂ.ಕಿ. ಬೆಂಗಳೂರು-106

Lab ID : CP-RW-2022-04-28-31

Date: 19-04-22

AFTER EXTRACTION - Trail-1

Total Weight of the Sample(gm) : 472

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	11	11	2.3	97.7	90-100
9.5	78	89	18.9	81.1	70-88
4.75	101	190	40.3	59.7	53-71
2.36	79	269	57.0	43.0	42-58
1.18	31	300	63.6	36.4	34-48
0.6	23	323	68.4	31.6	26-38
0.3	55	378	80.1	19.9	18-28
0.15	28	406	86.0	14.0	12-20
0.075	25	431	91.3	8.7	4-10

AFTER EXTRACTION - Trail-2

Total Weight of the Sample(gm) : 471

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	12	12	2.5	97.5	90-100
9.5	70	82	17.4	82.6	70-88
4.75	92	174	36.9	63.1	53-71
2.36	91	265	56.3	43.7	42-58
1.18	35	300	63.7	36.3	34-48
0.6	38	338	71.8	28.2	26-38
0.3	35	373	79.2	20.8	18-28
0.15	34	407	86.4	13.6	12-20
0.075	22	429	91.1	8.9	4-10

* The results obtained are satisfactory as per standard requirements.

FOR CIVIL Pro.

CIVIL Pro Sig..... Date..... BANGALORE

R KARTHIK RECHAN
*Authorized Signatory
Quality Manager

End of Report

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ
ಬ.ಜ.ಬ.ಪ. ಬೆಂಗಳೂರು-